# REMEDIAL INVESTIGATION SCOPE OF WORK FOR CORRECTIVE ACTION BEYOND THE FACILITY BOUNDARY TITTABAWASSEE RIVER AND FLOODPLAIN

#### **PURPOSE**

Dow's Hazardous Waste Site Operating License ("License"), Condition XI.B.2., issued on June 12, 2002, requires Dow to submit to the Michigan Department of Environmental Quality ("MDEQ") for review and approval a Scope of Work ("SOW") for conducting Remedial Investigation ("RI") of the Tittabawassee River Sediments and Floodplain. The SOW outlines the general steps involved in the implementation of a RI, which will be elaborated upon in the RI Workplan that will be submitted to MDEQ for review and approval following approval of the SOW.

The License also requires Dow to propose Interim Remedial Activities and a Public Participation Plan along with the SOW.

The SOW is intended to be a preliminary outline that provides an overview of the contents of the RI Workplan that Dow will prepare after approval of the SOW by MDEQ.

The RI Workplan will be developed by Dow working with the MDEQ after Dow and MDEQ receive public input on the SOW. As it is developed, the RI Workplan may vary from the SOW in its organization, task, prioritization of activities, or other aspects, subject to MDEQ approval.

#### Outline of the SOW

#### TASK I: INTERIM RESPONSE ACTIONS

- A. Riverside Boulevard
- B. Immerman Memorial Park
- C. Freeland Festival Park
- D. West Michigan Park
- E. Mapping
- F. Wild Game Evaluation
- G. Community Information Center
- H. Public Information Materials

#### TASK II: DESCRIPTION OF CURRENT CONDITIONS

- A. Area Background
- B. Summary of Existing Data
- C. Definition of Data Gaps

# TASK III: RI WORKPLAN REQUIREMENTS

- A. Project Management Plan
- B. Data Collection Quality Assurance Project Plan
- C. Data Management Plan

#### TASK IV: REMEDIAL INVESTIGATION

- A. Environmental Setting
- B. Evaluation of Potential for Continuing Sources
- C. Characterization of Tittabawassee River Sediments and Floodplain Soils
- D. Prioritization and Identification of Locations for Further Sampling
- E. Current and Reasonably Anticipated Receptor Identification
- F. Human Health Risk Assessment
- G. Ecological Risk Assessment
- H. Data Analysis

#### TASK V: REPORTS

- A. Description of Current Conditions
- B. RI Workplan
- C. RI Report
- D. IRA Reports

#### TASK VI: PUBLIC PARTICIPATION PLAN

- A. Fact Sheets
- B. Mailing List
- C. Community Information Center
- D. Public Meetings

#### PROPOSED SCHEDULE OF TASKS

#### SCHEDULE OF SUBMISSIONS

#### TASK I: INTERIM RESPONSE ACTIVITIES

Condition XI.B.3.(a) of the License requires Dow to propose to MDEQ immediate Interim Response Activities ("IRAs") based on existing data. Following MDEQ approval of an IRA, Dow will submit an IRA Workplan for review and approval as provided for in License Condition XI.G.

IRA Workplans will be prepared for review and approval by the MDEQ, and will include the following:

- A description of the objectives of the response activity and how they will be achieved;
- A legal description of the specific parcel of property addressed by the interim response activity;
- A detailed description of the response activity to be undertaken, including all data that are relevant to the conclusions drawn; and
- A schedule for implementation of the proposed activity.

IRAs are immediate actions based on available data that may not be final remedial actions and are activities undertaken to address potential human exposure pathways. The IRAs identified below will be implemented in advance of the RI.

As requested by MDEQ, and without admission by Dow as to the need for the such measures, the following constitute the immediate IRAs to be undertaken by Dow:

- A. Dow will meet and consult with residents on Riverside Blvd and offer to conduct soil and blood sampling as well as an evaluation of human exposure, in advance of the RI activities.
  - 1. The proposed human exposure evaluation would be conducted for the purpose of determining relevant exposure pathways.
  - 2. The contents of the exposure evaluation would be determined based upon consultation with residents, the MDEQ, and appropriate health officials.
  - 3. The results of the evaluations would be presented and explained to the participating residents based on comparison data.
  - 4. The results of the evaluation would be used as the basis for proposal for further appropriate actions.

#### B Imerman Memorial Park

- 1. Dow will propose to MDEQ a sampling and analysis plan to further characterize the soil to determine relevant exposure pathways.
- 2. The results of the characterization will be used as the basis for a proposal for further appropriate action.
- 3. In advance of the implementation of the characterization plan Dow will propose and receive community input on measures that could be readily implemented to reduce exposure to soils.
- 4. Measures, subject to park management approval, will include provision of wash stations, the installation of alternative surfacing over exposed soil in high traffic areas (e.g. mulch, play surfacing, paving, etc.), and the construction of alternative play.
- 5. All work in the park, both investigation and exposure reduction measures, will be coordinated with the park management officials.

#### C. Freeland Festival Park:

- 1. Dow will propose to MDEQ a sampling and analysis plan to further characterize the soil to determine relevant exposure pathways.
- 2. The results of the characterization will be used as the basis for a proposal for further appropriate action.
- 3. In advance of the implementation of the characterization plan Dow will propose and receive community input on measures that could be readily implemented to reduce exposure to soils.
- 4. Measures, subject to park management approval, will include provision of wash stations, the installation of alternative surfacing over exposed soil in high traffic areas (e.g. mulch, play surfacing, paving, etc.), and the construction of alternative play areas.
- 5. All work in the park, both investigation and exposure reduction measures, will be coordinated with the park management officials.

#### D. West Michigan Park:

1. Dow will propose to MDEQ a sampling and analysis plan to further characterize the soil to determine relevant exposure pathways.

- 2. The results of the characterization will be used as the basis for a proposal for further appropriate action.
- 3. In advance of the implementation of the characterization plan Dow will propose and receive community input on measures that could be readily implemented to reduce exposure to soils.
- 4. Measures will include, subject to park management approval, provision of wash stations, and the construction of alternative play areas.
- 5. All work in the park, both investigation and exposure reduction measures, will be coordinated with the park management officials.
- E. Dow will prepare comprehensive mapping of the Tittabawassee River and Floodplain.
  - 1. The mapping will be used to identify information relevant to exposure pathways (e.g. land use categories, sampling data locations, topography, FEMA floodplain information, etc.).
  - 2. The mapping will be periodically updated with information as it becomes available.
- F. Dow will conduct a preliminary evaluation of wild game (e.g. turkey, deer).
  - 1. This preliminary evaluation will begin the process of assessing the potential human exposure pathway of game consumption for game taken from the Floodplain.
  - 2. This preliminary study will be the basis for a more complete evaluation that will be part of the RI.
  - 3. This preliminary evaluation will be coordinated with State and Federal natural resources officials
  - 4. The information collected will be reported and will include available comparison data.
- G. Dow will establish a Community Information Center.
  - 1. The Community Information Center will provide community related information to assist residents with actions that they can take to reduce the potential for exposure, as appropriate.
  - 2. The setup and the contents of the information center will be developed based on community input.

3. The information will also include an explanation of the RI process as well as information about the RI itself, which will be updated during the course of the RI.

#### H. Dow will develop public information materials.

- 1. The public information materials will be made available through the Community Information Center to assist residents with actions that they can take to reduce the potential for exposure.
- 2. The information materials will cover topics of interest to residents (e.g. dust mitigation, handling of home, grown vegetables, etc.) and will be developed for different segments of the community (e.g. educational information for schools, information for homeowners, for contractors, etc).

#### TASK II: DESCRIPTION OF CURRENT CONDITIONS

Dow will submit for MDEQ approval a report providing background information pertinent to the Tittabawassee River Sediment and Floodplain. This report will include information gathered during previous investigations where the information is publicly available, Dow generated data, as well as other relevant data, which would help characterize the current conditions of Tittabawassee River Sediment and Floodplain. The Current Condition report will summarize the regional location, pertinent boundary features, general physiography, topography, river sediments and current land use for the Tittabawassee River and Floodplain.

#### A. Area Background:

The Current Conditions report will include map(s) that will be prepared to depict the following:

- 1. General geographic location;
- 2. Property lines will be delineated in the 100 year flood plain, with the owners of property clearly indicated;
- 3. Topography, waterways, wetlands, floodplains, water features, drainage patterns; and
- 4. Color coding indicating the Michigan land use categories of property in the Tittabawassee River's 100 year Floodplain.

#### B. Summary of Existing Data

The Current Conditions report will describe the existing information on the presence of dioxins and furans (the "chemicals of concern") in Tittabawassee River Sediment and Floodplain.

- 1. Available monitoring data and qualitative information on locations and levels of chemicals of concern in Tittabawassee River Sediment and Floodplain;
- 2. A preliminary description of the geology, soils, physiography, and meteorology for the Tittabawassee River and Floodplain; and
- 3. Available data on animals, fish, and other species endemic to or expected to be living in the Tittabawassee River or Floodplain.

#### C. Definition of Data Gaps

The Current Conditions report will address the following:

- 1. Identification of the portions of the Tittabawassee River Sediments and/or Floodplain where additional information is necessary; and
- 2. Identification of the type of additional information necessary to characterize the nature and extent of chemicals of concern in the River sediment and the Floodplain soil.
  - a. Identification and explanation of what media (sediment, soil, surface water or air) requires more information in particular segments of the River and Floodplain;
  - b. Identification and explanation of what additional media does not require further sampling in particular segments of the River and Floodplain;
  - c. Identification and explanation of the nature of necessary additional sampling; and
  - d. Identification and explanation of particular events and conditions that require further sampling (e.g. storm and flooding events, low flow conditions, seasonal changes, etc.).

#### TASK III: RI WORKPLAN REQUIREMENTS

As required by the License, following approval of the SOW, Dow will prepare a RI Workplan for evaluation of Tittabawassee River Sediment and Floodplain. The RI Workplan will include several components described below. During the implementation of the RI, the RI Workplan may be revised with the approval of the MDEQ to meet changing or unforeseen conditions. The components of the RI Workplan will include the following:

#### A. Project Management Plan:

The RI Workplan will include a Project Management Plan which will include a discussion of the technical approach, schedules, and personnel for conducting the RI. The Project Management Plan will also include:

- 1. A description of qualifications of the personnel performing or directing the RI, including contractor personnel; and
- 2. The overall management approach to the RI.

#### B. Data Collection Quality Assurance Project Plan:

The RI Workplan will include a plan to document monitoring, sampling, and analytical methodology to be used during the RI investigation to characterize the environmental setting. The Data Collection Strategy section of the Data Collection Quality Assurance Project Plan will include the following:

- 1. Description of the intended uses for the data and of the necessary level of precision and accuracy for these intended uses;
- 2. Description of methods and procedures to be used; and
- 3. Description of the rationale used to assure that the data accurately represent a characteristic of a population, or an environmental condition. Examples of factors which will be considered and discussed include:
  - a. Environmental conditions at the time of sampling;
  - b. Number of sampling points;
  - c. Representativeness of selected media; and
  - d. Representativeness of selected analytical parameters.

#### C. Data Management Plan:

The RI Workplan will include a Data Management Plan to document and track data and results. This Plan will identify and set up data documentation materials and procedures.

#### TASK IV: REMEDIAL INVESTIGATION

The purpose of a RI is to assess conditions in order to select an appropriate remedial action, if one is required, that adequately addresses those conditions. The remedial investigation will define the nature and extent of conditions in the Tittabawassee River Sediments and Floodplain.

More specifically, the RI will involve a series of investigations necessary to: describe the current Tittabawassee River Sediment and Floodplain conditions (Environmental Setting); evaluate the potential existence of continuing sources of chemicals of concern in sediments (Potential Continuing Source Characterization); define the nature and extent of chemicals of concern distribution in the Tittabawassee River Sediment and Floodplain (Characterization of the Tittabawassee River and Floodplain); identify actual or potential receptors in Tittabawassee River Sediment and Floodplain (Current and Reasonably Anticipated Future Receptor Identification); and conduct a risk assessment on human health (Human Health Risk Assessment) and on ecological receptors (Ecological Risk Assessment). The results of these evaluations will be summarized and in the RI report and the individual reports incorporated into the RI by reference.

#### A. Environmental Setting:

Information will be collected to supplement existing information on the environmental setting of the Tittawabassee River and Floodplain in order to characterize the following:

- 1. River Conditions. The RI will include:
  - a. A description of the Tittawabassee River and watershed related to the study area including:
    - i) Location, elevation, flow, velocity and volume;
    - ii) Location, elevation, and width of seasonal fluctuations and flooding characteristics (i.e., 100-year event);
    - iii) Depth and bottom characterization;
    - iv) Hydrodynamic modeling; and

- v) Drainage patterns.
- b. Description of the chemistry of the surface water and sediments (i.e. pH, total organic carbon).
- c. Description of sediment characteristics, including:
  - i) Deposition and erosion area(s) and rates;
  - ii) Thickness profile; and
  - iii) Physical and chemical parameters (e.g., grain size, density, organic carbon content, pH).
- d. Sediment transport, including:
  - i) Sediment movement from the river to the floodplain; and
  - ii) Sediment and soil movement from the floodplain to the river.
- 2. Floodplain Soils. The RI will provide for a general classification and description of the soils in the Tittabawassee River and Floodplain that will include:
  - a. Surface soil distribution;
  - b. Soil profile, including American Standard Test Method (ASTM) classification of soils;
  - c. Transects of soil stratigraphy;
  - d. Soil sorptive capacity;
  - e. Cation exchange capacity;
  - f. Soil organic content;
  - g. Soil pH;
  - h. Particle size distribution; and
  - i. Mineral content.
- 3. Climate. Climate in the study area will be characterized by,
  - a. Annual and monthly rainfall averages;

- b. Definition of less than 100 year Floodplain areas (e.g. 1 yr, 5 yr, 25 yr, 50yr floodplain areas);
- c. Monthly temperature averages and extremes;
- d. Wind speed and direction; and
- e. Evaporation data.
- B. Evaluation of the Potential for Continuing Sources:

The RI will include an evaluation of whether there are any continuing sources of chemicals of concern in the Tittabawassee River sediments by reviewing the information collected under subtask IV. A., IV.C. and IV.D. The RI will coordinate with License Condition X.M - Surface Water Monitoring Program, under which Dow will implement a program to monitor surface water to determine if the Dow facility is a source of chemicals of concern to the Tittabawassee River. If continuing sources are identified they will be characterized as follows:

- 1. Location of source area; and
- 2. Known information on nature and extent of source area.
- C. Characterization of Tittabawassee River Sediments and Floodplain Soils, fish and wildlife:

The RI will collect analytical data on soils, surface water, and sediment, as appropriate, in the Tittabawassee River and Floodplain. The RI will also collect and analyze fish and other wildlife that live in Tittabawassee River and on the Floodplain. These data shall be sufficient to define the concentrations of chemicals of concern in the study area.

- 1. Statistical Sampling of Sediments and Floodplain Soils:
  - a. Based on the Data Gap analysis (Task II.C.), locations for sampling will be identified and sampling will be conducted of sediments or soils;
  - b. A statistical sampling approach will be applied;
  - c. The approach chosen will result in a sampling plan that will characterize the concentration of chemicals of concern in the Tittabawassee River sediments and Floodplain soils; and
  - d. Further characterization and evaluation of sediment layers relative to chemicals of concern concentrations, deposition rates relative to geologic

events, and relationship (if any) between total organic carbon and chemicals of concern concentrations will be conducted.

# 2. Sampling of Fish and Wildlife:

- a. The RI will collect samples of fish, game animals and other species in support of the evaluations to be conducted under subtasks IV.E., IV.F and IV.G. with respect to receptor identification and human and ecological risk assessments.
- b. The sampling of fish, game animals and other species will be coordinated with State and Federal natural resource officials.

# 3. Additional Sampling:

If the analysis of the sampling results indicate that additional information is needed for characterization, then additional sampling will be conducted.

#### D. Prioritization and Identification of Location for Sampling

The RI sampling work for Task IV.C. will be prioritized based upon the potential for human exposure and presence of the highest concentrations of chemicals of concern. A variety of evaluations will be performed on existing data to determine what additional data is required to be able to generate site specific criteria as provided for in License Condition XI.B.3.b(iv) and to aid in the prioritization activities. As an example, humans that either live on or have access to the Floodplain have greater potential to come in contact with chemicals of concern via soil contact; therefore, the priority of the RI characterization activities will focus first on Floodplain soils, then move on to River Sediments.

- 1. The following activities will be incorporated into the evaluation of the prioritization of investigative activities in the Tittabawassee Floodplain:
  - a. Using FEMA maps, topographic maps, observations of River features, aerial photographs, and surveys of residents and officials, to determine those portions of the Floodplain that are most frequently flooded;
  - b. Identifying the areas in the Floodplain that are most frequently flooded and are in greatest proximity to residences and other places where the public is likely to frequent;
  - c. The sampling data that shows the concentrations and depths of the location of the chemicals of concern identified will be compared with the locations where there is significant human activity in order to determine where there is the highest potential for exposure to the highest concentrations of chemicals of concern:

- d. A lower priority will be placed on the infrequently flooded areas (e.g. due to higher property elevations and distance from the River bank), on current land uses with less exposure potential, and areas in the Floodplain that have not been developed; and
- e. The prioritization may change based on the conclusions that are drawn from data that are collected (i.e. an iterative approach).
- 2. The timing of RI activities may be affected by the need to obtain permission for access to property, the requirement to obtain permits from governmental agencies, weather and other conditions which Dow cannot control.
- E. Current and Reasonably Anticipated Receptor Identification:

Human populations and ecological habitats that come in contact with chemicals of concern through contact with Tittabawassee River Sediment and Floodplain soils will be characterized. If present, any observable impacts to ecological habitants or receptors will be described.

The following characteristics will be identified:

- 1. Current and reasonably anticipated future human use of or access to the Tittabawassee River and Floodplain including, but not limited to:
  - a. Types of current and reasonably anticipated future uses (e.g. residential, commercial, zoning/deed restrictions, etc.);
  - b. Any use restrictions relative to the Tittabawassee River and Floodplain and the locations where significant concentrations of chemicals of concern are present; and
  - c. Evaluation of other use patterns relative to potential human exposure pathways.
- 2. A general description of the ecosystem overlying and in proximity to the Tittabawassee River and Floodplain including, but not limited to:
  - a. Location and size of major habitat types (e.g., streams, wetlands, forested areas);
  - b. Several species composition and relative abundance of plant and animal species that utilize these habitants;

- c. Documentation of the potential presence of any federal or state listed threatened, endangered, or rare species; or unique habitants through contact with State and Federal resource agencies and
- d. Evaluation of other potential exposure pathways to ecological species and/or systems present in the Tittabawassee River and/or Floodplain. A demographic profile of the people who use or have access to the Tittabawassee River and Floodplain.
- 4. Studies will be conducted to support the evaluation of Potential Human Exposure Pathways:
  - a. A study to collect actual data on the residential, recreational, agricultural, commercial and other uses of the River and Floodplain;
  - b. A bioavailability study will be performed to determine what portion of chemicals of concern found in Tittabawassee River Sediments and Floodplain soils are biologically available as determined by *in vivo* laboratory studies with soil taken from the study area;
  - An evaluation of plant uptake of chemicals of concern will be performed to determine the likelihood that vegetables or fruits represent a significant risk of exposure;
  - d. An evaluation of potential inhalation exposure pathways will be conducted; and
  - e. An evaluation of direct skin contact exposure will be conducted, to determine human absorption rates of chemicals of concern from Tittabawassee River Sediments and Floodplain soils.

#### F. Human Health Risk Assessment:

Dow will conduct site-specific risk assessments for the Tittabawassee River and Floodplain utilizing available data as well as data that will be generated during the RI to develop site-specific criteria as provided for in License Condition XI.B.3.b(iv). This will include risk assessments based on site-specific exposure parameters coupled with probabilitistic (e.g. Monte Carlo) approaches. This risk assessment process is summarized in the following steps.

1. Exposure Assessment: As required in Condition XI B. 3.(b), Dow will evaluate the level and routes of potential exposure to chemicals of concern to humans via Tittabawassee River Sediments and Floodplain soils. Exposure assessment includes information gathered from Task IV along with an evaluation of all exposure pathways and their frequency relevant to Floodplain residents.

- a. The initial exposure pathways to be evaluated are listed in the Part 201 regulations; and
- b. Additional exposure pathways will be identified and evaluated.
- 2. <u>Toxicity Assessment/Hazard Identification:</u> Toxicity assessment is equivalent to hazard identification; and
- 3. <u>Risk Characterization:</u> The risk characterization will summarize and combine the output of the preceding steps by computing estimates of risk. Probabilistic risk assessment will be used to present a range of potential risks. In addition, risk estimates will be presented in terms of a theoretical cancer risk (i.e., one in one hundred thousand), a hazard quotient for non-cancer endpoints (i.e., how the estimated daily dioxin dosage relates to the tolerable daily intake dosage) or establishing floodplain soil and sediment concentrations that do not pose an unacceptable risk. An analysis of uncertainties that affect the level of confidence inherent in these risk estimates will be provided.

# G. Ecological Risk Assessment:

Properly analyzing the ecological risks associated with residues in sediments and/or soils is a complicated, multifaceted task best addressed within the framework of an ecological or environmental risk assessment. Critical sediment and chemical fate and transport processes (fate, mobility, and availability) in relation to the spatial and temporal distribution of chemicals of concern will be studied in Tittabawassee River Sediment and Floodplain. A baseline ecological risk study to be conducted by Michigan State University will be initiated in the advance of the RI. The environmental risk assessment process consists of the following steps:

- 1. <u>Problem Formulation</u>: This initial step involves the establishment of the goals, breadth, and focus of the ecological risk assessment, resulting in the ecological conceptual model. The conceptual model describes how the chemicals of concern might affect the potential ecological receptors, and identifies assessment and measurement endpoints. The problem formulation step is used both for screening purposes and to refine the baseline ecological risk assessment.
- 2. <u>Analysis</u>: This step examines both the ecological effect endpoints and the chemical exposure assessment. The exposure assessment can include exposure pathways and characterization of likely exposure scenarios for potential ecological receptors. Alternatively or in addition, the analysis phase will include field measurements of potentially affected populations compared to reference populations, and/or measurement of chemical residues in receptors and media of interest.

3. <u>Risk Characterization</u>: A weight-of-evidence approach is used to examine the field data, interpret the relationship between exposure and effects, and generate risk estimates for the assessment endpoints. The risk characterization includes a qualitative and quantitative evaluation of the overall risks posed to wildlife organisms and the associated uncertainties.

# H. Data Analysis:

Dow will analyze the investigation data outlined in this Task and prepare a report. The objective of the data analysis section is to summarize the results of the analysis collected for the RI and its report. The analysis will also ensure data quality assurance procedures have been followed.

#### TASK V: REPORTS

Draft and final reports will be prepared that communicate the results of Tasks I through IV. These reports will be submitted in accordance with the schedule contained in the License and the RI Workplan, upon its approval:

- A. Interim Response Actions (Task I)
- B. Description of Current Conditions (Task II)
- C. RI Workplan (Task III)
- D. RI Report (Task IV)

#### TASK VI: PUBLIC PARTICIPATION PLAN

It is anticipated that the following types and means of communication with the public will occur during the process outlined above. The specific actions to be taken will be based on, in part, the level of community interest in various tasks and what is needed to keep the public apprised of significant developments in the RI process:

A. Fact Sheets. Dow will prepare Fact Sheets to be reviewed by MDEQ that will address key topics and milestones of interest to the community (e.g. the Corrective Action process, IRAs, the RI Workplan, RI Findings, etc.). These Fact Sheets will be made available in the Community Information Center and on the Dow website.

- B. Mailing List. Dow will prepare and maintain a mailing that can be used by Dow and the MDEQ to facilitate communication of events and information related to the RI process.
- C. Community Information Center.
  - 1. Paper Document Collection. Dow will secure and maintain location or locations within the community where the residents can review copies of the relevant documents.
  - 2. Website. Dow will maintain a website that will include copies of the paper documents maintained in the paper document repository.
- D. Public Meetings. Dow will arrange for Public Meetings to be held in the community in places and at times convenient for the residents. Small-group or one-on-one meetings will be held as necessary or appropriate to discuss concerns. Larger, multi-party meetings or "town meetings" will be held when that is the appropriate format. Dow will coordinate the scheduling and planning of Public Meetings with MDEQ.
  - 1. Public Meetings will be scheduled in conjunction with the initial submission and following approval of Dow's written submissions of workplans and significant reports.
  - 2. Public Meetings will be schedule in coordination with any License modification activities.

#### PROPOSED SCHEDULE OF TASKS

The following is a preliminary overview of the scheduling of the Tasks and major subtasks to be conducted under the RI. More details about the particular sub-tasks and their phasing will be addressed in the RI Workplan.

phasing will be addressed in the RI Workplan.	
Tasks	Timing
Interim Response Actions	
A. Riverside Blvd	Immediate implementation pursuant to the workplan schedule following DEQ approval of IRA workplan
B. Freeland Festival Park	Immediate implementation pursuant to the workplan schedule following DEQ approval of IRA workplan
	Tasks  Interim Response Actions  A. Riverside Blvd

#### PROPOSED SCHEDULE OF TASKS (continued)

Tasks	Timing
C. West Michigan Park	Immediate implementation pursuant to the workplan schedule following DEQ approval of IRA workplan
D. Mapping	Immediate implementation pursuant to the workplan schedule following DEQ approval of IRA workplan
E. Wild game evaluation	Immediate implementation pursuant to the workplan schedule following DEQ approval of IRA workplan
F. Community Information Center	Immediate implementation pursuant to the workplan schedule following DEQ approval of IRA workplan
G. Public Information Materials	Immediate implementation pursuant to the workplan schedule following DEQ approval of IRA workplan

# II. Description of Current Conditions (Specific Steps)

- A. A workplan will be prepared for the preparation of the Current Condition portion of the RI Workplan submitted for DEQ approval 45 days after DEQ approval of SOW
- B. The Current Conditions Report will be submitted Definition of Data Gaps 180 days after MDEQ approval of Current Conditions workplan

# III. RI WorkPlan Requirements

A. The Project Management Plan, Data Collection Quality Assurance Project Plan and Data Management Plan will be submitted for DEQ approval 90 days after DEQ approval of the SOW.

# IV. Remedial Investigation

A. The RI Work Plan will be submitted for DEQ approval 60 days after the approval of the Current Conditions Report.

# SCHEDULE OF SUBMISSIONS

<b>Dow Submission</b>	<b>Due Date/Task Commencement Timing*</b>
Task II Current Conditions Report	180 days after MDEQ approval of Workplan
RI Workplan	60 days after MDEQ approval of Current Conditions
	Report
IRA workplan	60 days after MDEQ approval of IRA
IRA Implementation	Upon MDEQ approval of IRA workplan
Implementation of RI	Upon MDEQ approval of RI Workplan
RI Report	60 days following completion of RI

<sup>\*</sup>Dow will apply for any necessary permits or seek access to private property upon the approval of the applicable Workplan.